BKK - Monitoring

AHS

Agenda

BKK Air Monitoring Meeting
June 15, 1982

I. Introductions

II. Review of air monitoring and landfill gas analysis completed to date. Discussion of sampling and analytical techniques. (SCAQMD)

III. Review of L.A. Basin air monitoring data. (ARB)

IV. Review of toxicological risk estimates done to date. (DOHS)

V. Selection of substances for future air monitoring. (all participants)

VI. Selection of sampling and analytical methods for the selected substances.(all participants)

VII. Selection of new sampling locations.

DOHS Suggested
BKK Carcinogenic Substances of Concern

Compound	Concentration in Landfill Gas (source)
1,1-dichloroethene (vinylidene chloride)	1200 ppm (1)
1,2-dichloroethene (ethylene dichloride)	800 " (1)
1,1,2-trichloroethene (TCE)	1000 " (1)
tetrachloroethene (Perc)	1500 " (1)
chloroethene (vinyl chloride)	2357 " (3)
benzene	6300 " (2,4)
trichloromethane (chloroform)	230 " (2,4)
(chlorobenzene) [5]	500 " (1,5)

1. BKK Landfill Odor Study, Eutek Inc. (1981)
2. Analytical Research Laboratories, Inc. for BKK/Stauffer Chemical (6/17/1981)
3. Mean value for well gas and burner inlet (N=40), Source Test Report C-81-96 A & B, South Coast Air Quality Management District, June 10, 1982
4. Measured in residential areas, 2nd Iterim Report,"Investigation of Odorous and Volatile Compounds for BKK Class I Landfill Site in the City of West Covina", Environmental Engineering Program, University of Southern California, 1980.
5. Possible landfill gas tracer (in addition to vinyl chloride) ?

EUTEK INC.
process development and engineering

TABLE 25

GC ANALYSIS OF GAS SAMPLES
(ppm unless noted)

Compound	Sample					
	Surface Sample	Nitric Well	Cyanide Well	Landfill Gas Sample 6	Landfill Gas Sample 3	Burner Exhaust
methane				18.6%	20.0%	
carbon dioxide				20.9%	21.9%	
nitrogen				48.2%	45.2%	
oxygen				9.6%	9.4%	
argon				0.5%	0.5%	
other hydrocarbons				2.2%	1.2%	
chloroethene	140			1200	100	
chloroethane				250	10	
dichloromethane	1200			1500	50	
dimethyl sulfide[a]				400	---	
2-proponal				250	20	
1-1 dichloroethene				1200	100	
1-1 dichloroethane	100	20		5000	500	
1-2 dichloroethene	70			800	50	
1-2 dichloroethane	500	50	20	5000	500	20
2-butanol	---			250	10	
cyclohexane	---			250	20	
methylcyclopentane	60			500	40	
2-3 dimethylbutane				500	30	
trichloroethene	80	20		1000	50	
benzene	120	20	10	2000	150	
hexane	80			500	250	
1-3 dimethyltranscyclopentane	90			750	---	
diethylsulfide				250	---	
methylethylsulfide				50	---	
methylcyclohexane	170	10		1250	100	
2-2 dimethylpentane				500	30	
2-3 dimethylpentane	80			750	---	
C_8H_{16}	100			750	---	
tetracholorethene		10		1500	100	
toluene	500	40	20	3500	300	10
1-2-3 trimethylcyclohexane				500	---	
chlorobenzene				500	40	
2-5- dimethylhexane				500	---	
4-ethyl 2 methylhexane				500	---	
octane				500	---	
1-1 trichloroethane		150				
1,1,2 trichloroethane		10	10			3
methyl sulfide				---	10	
1,2 dimethylcyclopentane				---	40	
2,2,3 trimethylhexane				---	40	
unsat. hydrocarbon				---	50	
C_9H_{20}				---	10	
2-4 dimethylhexane				---	30	
2 propanone	100					
2 methylbutane	50					
2,2,3,3, tetramethylbutane	100					
dibutylesterethanedioicacid						
4 methyl 1 hexanol		10				
3,5,5 trimethyl, 1 hexene		0.5				
1,1,1, trichloroethane			30			10
1,1 dimethylcyclopentane			10			
Total reduced sulfur as H_2S	40.3	165	255	134	71.5	298

[a]Includes mercaptans, if present

BKK/Stauffer

ARL REPORT
6/17/81

Well #25

Compound	ppm
vinyl chloride	12,800.
dichloromethane	100.
methyl sulfide	500.
1,2 dichloroethene	300.
1,1 dichloroethane	170
1,1 dichloroethene	250.
chloroform	230.
1,2 dichloroethane	10,900.
methyl cyclopentane	150.
1,3 dichloro-1-propene	8.
trichloroethene	150.
benzene	6,300.
1,1,2 trichloroethane	625.
hexane	100.
trans-1,3 dimethyl cyclopentane	50.
methyl cyclohexane	200.
4,4-dimethyl-1,2-pentadiene	5.
ethenyloxy isooctane	25.
tetrachloroethene	30.
toluene	2,400.
chlorobenzene	125.
ethylbenzene	16.
3-ethyl-4-methyl hexane	10.

BKK COMMUNITY INFORMATION PROGRAM

The Problem

A number of state and local agencies have regulatory authority over the BKK landfill site in West Covina. Although all of these agencies have programs to inform the public of regulatory actions, some have been more effective than others in their efforts to keep citizens informed. In particular, residents have found that information provided by some agencies has been sporadic, and that information activities have not been well coordinated.

There are also important activities relating to pending Legislation and the State's program to phase out reliance on hazardous waste landfills which may directly affect operations at BKK and would, therefore, be of concern to citizens and local officials.

A better system of information collection and dissemination is urgently needed to respond to the valid concerns of the citizens of West Covina and their need for information about activities which may affect them.

The Solution

The Toxic Substances Control Division at the Department of Health Services has primary authority for permitting operations at BKK. The Division's Office of Public Education & Liaison (OPEL) will be responsible for the collection and dissemination of information from all agencies with jurisdiction over the BKK landfill. This office will conduct the following activities to assure that accurate and complete information is provided to citizens and local officials:

- Develop a mailing list of West Covina residents, public officials, and organizations concerned about the BKK landfill.
- Develop a system of collecting information on monitoring, regulatory, and legislative activities relating to BKK, and State programs to phase out hazardous waste landfills.
- Prepare regular reports which provide timely information on all relevant activities, and pending legislation.